

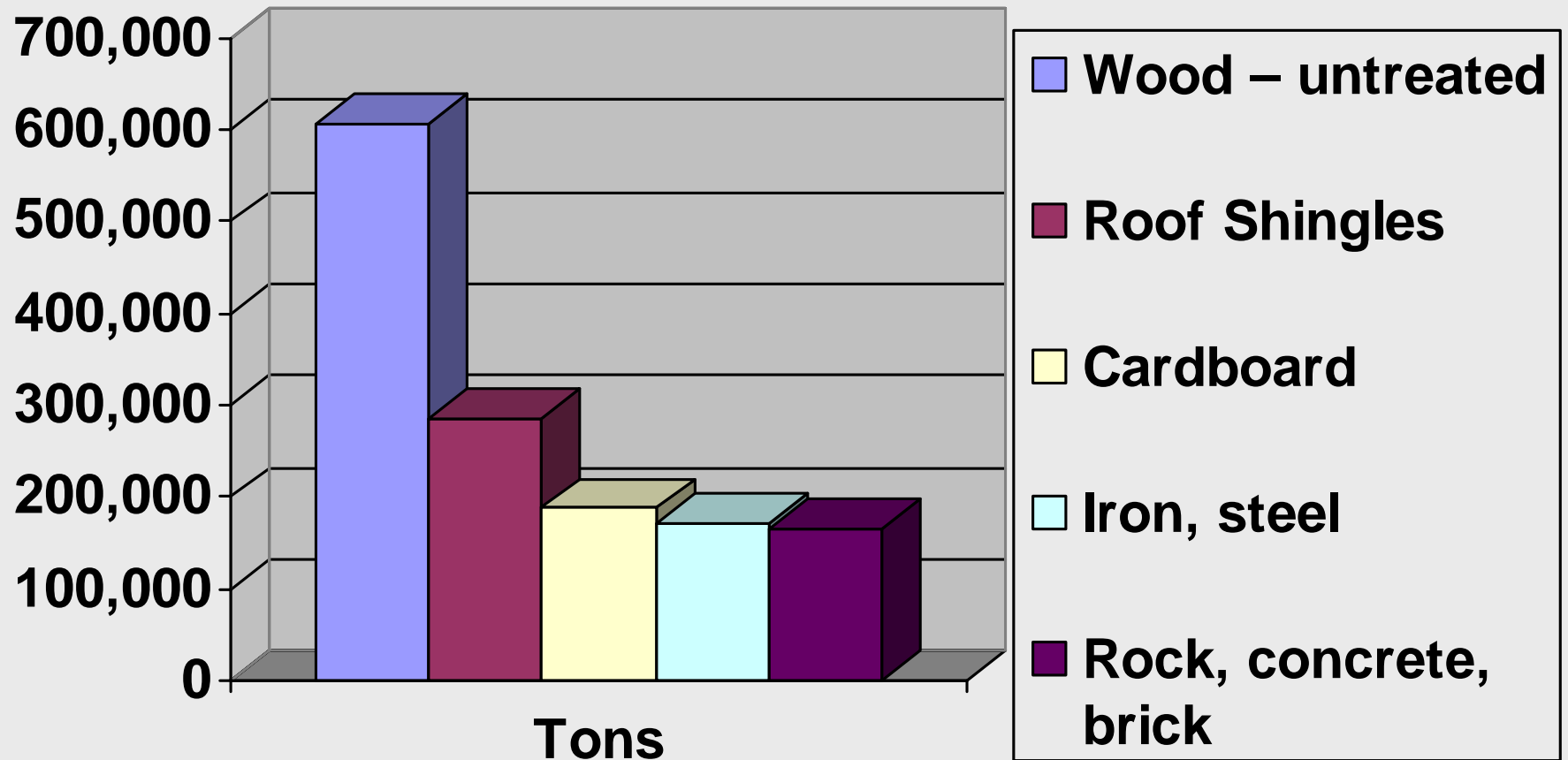


Construction Waste Recycling





Construction wastes



Why? Benefits?

- **Community benefits**
 - Materials reused - reduced cost - Historical salvage
 - Reduced wastes = reduce global warming
- **Green building recycling goals**
- Saving money reduced waste = reduced cost
- Safer job site
- Local ordinances



Michigan.gov Home

[DEQ_Home](#) | [Online_Services](#) | [Permits](#) | [Programs](#) | [Site_Map](#) | [Contact_DEQ](#)

Search



pollution prevention

>Initiatives

>Outreach

[Alternative Fuels](#)

[Automotive](#)

[Food Processing P2](#)

[Green Construction and
Demolition](#)

[Restaurant P2](#)

[Shooting Range Stewardship](#)

>Partnerships

>Recycling

>Regulatory Integration

>RETAP

>Green Chemistry

inside DEQ

key topics

news & events



Printer Friendly



Text Version



Email Page



A+Text Size

Green Construction and Demolition

[Construction Environmental Resources](#)

The construction and operation of homes and commercial buildings contribute significantly to a community's landuse and transportation impacts as well as the energy demand. Efforts known as "green building and deconstruction are working to minimize these impacts.

> [More](#)



Information

- [Construction Resources](#)
- [FAQ - Demolition, Deconstruction, and Decommissioning Frequently Asked Questions](#)
- [FAQ - Green Building Frequently Asked Questions](#)
- [Green and Sustainable Buildings in Michigan](#)
- [Introduction to Green Building - Dept. of Energy](#)
- [Making the Case for Green Building](#)
- [Michigan Green Building Case Studies](#)
- [Publications - Construction related](#)
- [Waste Recycling - Local contacts](#)
- [Waste Recycling - State resources](#)

Upcoming Events

- **August 21-23, 2008**
[Great Lakes Green 2008](#)
Grand Rapids, MI

Related Links

- [Building Materials -](#)

Departments/Agencies

Online Services


Surveys

RSS Feeds

DEQ Quick Links

- [DEQ Calendar](#)
- [DEQ Military Salute](#)
- [DEQ Who Does What List](#)
- [DEQ Publications](#)
- [DEQ Acronyms](#)
- [DEQ Laws and Rules](#)
- [DEQ Shortcuts](#)
- [Public Comment Opportunities](#)
- [DEQ Staff Spotlight](#)
- [DEQ Forms](#)
- [DEQ Training & Workshops](#)

Waste Recycling – Local



Department of Environmental Quality

Michigan.gov Home

[DEQ_Home](#) | [Online_Services](#) | [Permits](#) | [Programs](#) | [Site_Map](#) | [Contact_DEQ](#)

Michigan.gov

The Official State of Michigan Website

pollution prevention

[Initiatives](#)

[Outreach](#)

[Alternative Fuels](#)

[Automotive](#)

[Food Processing P2](#)

[Green Construction and Demolition](#)

[Restaurant P2](#)

[Shooting Range Stewardship](#)

[Partnerships](#)

[Recycling](#)

[Regulatory Integration](#)

[RETAP](#)

[Green Chemistry](#)

inside DEQ

key topics

news & events

Printer Friendly

Text Version

Email Page


A- A+ Text Size

Construction Waste Recyclers

The map below is provided to assist Michigan residents, businesses, institutions and organizations recycle construction, renovation and deconstruction materials. Prior to using this map, consider possible reuse of all materials through donation to community efforts or area re-stores like Habitat for Humanity. A list of restores is available at: www.michigan.gov/documents/deq/deq-ess-p2-green-cw-matts-restores_206540_7.doc


Clicking on the map will provide a list of recyclers of construction materials within a geographic area. These lists are from the Michigan Recycled Materials Market Directory. The lists include processors, collectors, and brokers of reclaimable materials in the following categories:

Asphalt-Concrete	Corrugated Cardboard	PVC
Salvaged Architecture	Demolition Debris	Scrap Lumber
Carpet Padding	Fluorescent Lights	Stumps -Trees
Ceiling Tiles	Mercury	Window Glass
Construction Debris	Pallets	



Waste Recycling – Local

CONTACT INFORMATION				Asphalt-Concrete	Salvaged Architecture	Carpet Padding	Ceiling Tiles	Construction Debris	Corrugated Cardboard	Demolition Debris	Fluorescent Lights	Window Glass	Mercury	Pallets	PVC	Scrap Lumber	Stumps-Trees
MACOMB COUNTY HABITAT FOR HUMANITY RESTORE 37829 GROESBECK * CLINTON TWP. MI 48036- macombhabitat.org					A			C								SL	
EMILY CALVERT, I DIR. 586/263-1540 * restore@macombh FAX				INTERESTED IN USEABLE BUILDING MATERIALS, PAINT AND FURNITURE.													
MID-MICHIGAN RECYCLING 24935 21 MILE RD. * MACOMB MI 48042- www.mid-michiganrecycling.com														P			T
JOHN SMITHLING, MGR. 586/598-5807 810/560-0481 * FAX				INTERESTED IN CLEAN CHIPS, BRUSH, LOGS, STUMPS, INDUSTRIAL WOOD AND PALLETS.CAN PROVIDE GRINDING SERVICE.													
JOE DAVIS CRUSHING, INC. 25501 SHERWOOD * WARREN MI 48091- * FAX 586/575-3612				CA													
MARY LOU VAN WATERSCHOOT, MGR. 586/757-3612 * * FAX 586/575-3612				INTERESTED IN CLEAN, BROKEN CONCRETE ONLY. NO WIRE OR MESH													



Department of Environmental Quality


[Michigan.gov Home](#)
[DEQ_Home](#) | [Online_Services](#) | [Permits](#) | [Programs](#) | [Site_Map](#) | [Contact_DEQ](#)


pollution prevention


- >Initiatives
- >Outreach
 - Alternative Fuels
 - Automotive
 - Food Processing P2
 - Green Construction and Demolition**
 - Restaurant P2
 - Shooting Range Stewardship
- >Partnerships
- >Recycling
- >Regulatory Integration
- >RETAP
- >Green Chemistry

inside DEQ

- key topics
- news & events





Michigan Timely Application

Green Construction and Demolition

Construction Environmental Resources

The construction and operation of homes and commercial buildings contribute significantly to a community's landuse and transportation impacts as well as the energy demand. Efforts known as "green" building and deconstruction are working to minimize these impacts.

> [More](#)

Information

- [Construction Resources](#)
- [FAQ - Demolition, Deconstruction, and Decommissioning Frequently Asked Questions](#)
- [FAQ - Green Building Frequently Asked Questions](#)
- [Green and Sustainable Buildings in Michigan](#)
- [Introduction to Green Building - Dept. of Energy](#)
- [Making the Case for Green Building](#)
- [Michigan Green Building Case Studies](#)
- [Publications - Construction related](#)
- [Waste Recycling - Local contacts](#)
- [Waste Recycling - State resources](#)

Upcoming Events

- August 21-23, 2008**
Great Lakes Green 2008
Grand Rapids, MI

Related Links

- [Building Materials -](#)

Departments/Agencies

Online Services

Surveys

RSS Feeds

DEQ Quick Links

- DEQ Calendar
- DEQ Military Salute
- DEQ Who Does What List
- DEQ Publications
- DEQ Acronyms
- DEQ Laws and Rules
- DEQ Shortcuts
- Public Comment Opportunities
- DEQ Staff Spotlight
- DEQ Forms
- DEQ Training & Workshops

www.michigan.gov/deqconstruction



pollution prevention

>Initiatives

>Outreach

Alternative Fuels

Automotive

Food Processing P2

Green Construction and
Demolition

Restaurant P2

Shooting Range Stewardship

>Partnerships

>Recycling

>Regulatory Integration

>RETAP

>Green Chemistry

inside DEQ

key topics

news & events



Printer Friendly



Text Version



Email Page

A- A+Text Size

Construction Waste Recycling



C&D debris is uncontaminated solid waste resulting from construction, building remodeling, repair, deconstruction or demolition operations. It is estimated that it is the source for 30% of all waste sent to the municipal landfills. Much of the waste could be usable. We pay three times for materials that aren't used or recycled: once when we buy materials, second for disposal and third time when we purchase new materials to replace those that could have been reused.



Benefits to Recycling- This Michigan Recycling Coalition document lists 10 Reasons to Recycle.

Material Donations / Reuse

Consider donations of uncontaminated waste materials to: boy/girl scout projects; theater groups; community rebuilding efforts; vo-tec construction classes; etc. Building items can be donated to or purchased from re-stores. Most accept and re-sell usable items such as: windows; paint; lamps; flooring; cabinets; doors; etc. These stores are also good resources for small jobs that need painting and home decorating materials at economical prices.

Building Material Restores - donations and resale

Material Recycling

Recycling success is dependent upon available local resources. Below are lists to help identify those local resources.

- Construction waste recycling companies and information (doc)
- Also check your local contacts and yellow pages.

Departments/Agencies

Online Services

Surveys

RSS Feeds

Related Content

- Survey for Construction and Demolition Web Site
- Construction Resources
- Construction Waste Recyclers
- FAQ - Green Building

Frequently Asked Questions

[DOC](#)

- FAQ - Demolition, Deconstruction, and Decommissioning Frequently

Asked Questions [PDF](#)

- Introduction to Green Building - Dept. of Energy
- Making the Case for Green Building
- Construction Related

Environmental Publications

[DOC](#)

- Green and Sustainable Buildings in Michigan
- MDEQ District Office is a "Green" State Office Building

ADDITIONAL RESOURCES:

Construction Recycling Resources

- [Brownfield Resources](#)
 - [EPA CD Resources for Brownfield Projects](#)
- [Building Material Recycling Resources](#)(doc)
- [Chicago Construction Recycling Requirements](#)
- [EPA Building Savings](#)- case studies
- [EPA website for Residential / Municipal Wastes](#)
- [MDEQ Recycling Web site](#)
- [Recycling Resources](#)(doc)

Construction Waste Management

- [Construction Waste Management \(doc\)](#)
Incorporating recycling into specs
- [Toxics Management, Recycling & Disposal \(doc\)](#) Also see the [FAQ](#).
Asbestos; Lead; Mercury; and Hazardous Waste (general)
- [Waste Spec \(model specs for construction recycling\)](#)



Deconstruction Resources



- [Deconstruction Companies](#)
(Also check the yellow pages)
- [Building Design Standards](#)
 - [Awards for deconstruction designs](#) - [Lifecycle Building Challenge](#)
 - [Design for Deconstruction](#)
 - [Design for Disassembly](#)
- [Deconstruction - Feasibility of](#)
- [Deconstruction Guide - Deconstruction Institute](#)
- [Deconstruction Guide - HUD](#)

Environmental Compliance

- [Air Quality \(doc\)](#)
Includes information on asbestos, fugitive dust, etc.
- [Federal Compliance Resources](#)
 - [CICA - Construction Industry Compliance Assistance](#)
 - [Federal Compliance Requirements - Construction](#)
 - [Federal Programs - links](#)
 - [Managing Your Environmental Responsibilities - Construction](#)
- [Frequently Asked Questions \(FAQ\)](#)
- [Inert Materials Notification \(pdf\)](#)
Required for 1,000 cubic yards of brick, masonry, pavement, broken concrete used for fill, riprap, slope stabilization, etc.
- [Regulations - see the FAQ](#)
- [Stormwater Requirements](#)



pollution prevention

>Initiatives

>Outreach

Alternative Fuels

Automotive

Food Processing P2

Green Construction and

Demolition

Restaurant P2

Shooting Range Stewardship

>Partnerships

>Recycling

>Regulatory Integration

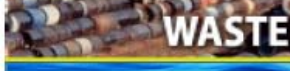
>RETAP

>Green Chemistry

inside DEQ

key topics

news & events



Michigan Timely Application
and Permit Service



Printer Friendly



Text Version



Email Page

A- A+Text Size

Construction Waste Recycling



C&D debris is uncontaminated solid waste resulting from construction, building remodeling, repair, deconstruction or demolition operations. It is estimated that it is the source for 30% of all waste sent to the municipal landfills. Much of the waste could be usable. We pay three times for materials that aren't used or recycled: once when we buy materials, second for disposal and third time when we purchase new materials to replace those that could have been reused.



Benefits to Recycling- This Michigan Recycling Coalition document lists 10 Reasons to Recycle.

Material Donations / Reuse

Consider donations of uncontaminated waste materials to: boy/girl scout projects; theater groups; community rebuilding efforts; vo-tec construction classes; etc. Building items can be donated to or purchased from re-stores. Most accept and re-sell usable items such as: windows; paint; lamps; flooring; cabinets; doors; etc. These stores are also good resources for small jobs that need building and home decorating materials at economical prices.

Building Material Restores - donations and resale

Material Recycling

Recycling success is dependent upon available local resources. Below are lists to help identify those local resources.

- Construction waste recycling companies and information (doc)
- Also check your local contacts and yellow pages.

Departments/Agencies

Online Services

Surveys

RSS Feeds

Related Content

- Survey for Construction and Demolition Web Site
- Construction Resources
- Construction Waste Recyclers
- FAQ - Green Building

Frequently Asked Questions

- [FAQ](#) - Demolition, Deconstruction, and Decommissioning Frequently

Asked Questions

- [PDF](#)
- Introduction to Green Building - Dept. of Energy
- Making the Case for Green Building
- Construction Related

Environmental Publications

- [PDF](#)
- Green and Sustainable Buildings in Michigan
- MDEQ District Office is a "Green" State Office Building



Recycling Companies

Companies that Recycle Construction & Deconstruction Materials

(This is not an endorsement of any company listed – This is provided for informational purposes only.)

Name	Address	Phone	Website / Comments
Southern Michigan Restores			
HFH ReStore	2811 Treat Highway Adrian 49221	517-266-0746	Mngr: Tracey Doering-Beatty www.habitat-lenawee.org
HFH ReStore	170 Aprill Drive Ann Arbor 48103	734-822-1530	Mngr: Ray Frye www.h4h.org restore@h4h.org
Recycle Ann Arbor (RAA)	2420 S. Industrial Hwy Ann Arbor 48104	734-662-6288	Reusable materials accepted at their site www.recycleannarbor.org
HFH ReStore	551 W. Michigan Ave Battle Creek 49015	269-966-2502	Mngr: Lee Wever Fax 269-966-2568 bcrestore@ctsmail.net www.habitatbc.org
HFH ReStore	2302 Plaza Dr. Benton Harbor 49022	269-927-0006	Mngr: Timothy Walls and Robert Mesa
HFH ReStore	7198 Grandriver Brighton 48114	810-220-9986	Peter Wang lchfhresalestore@sbcglobal.net www.livingstonhabitat.org



2420 South Industrial Highway • Ann Arbor, MI 48104 • 734.662.6288

Committed to reducing waste and conserving resources through reuse.

about us
FAQs
human resources
brochures
ecology center

amazon.com

The ReUse Center

Urban Wood For Sale

The ReUse Center has an extensive stock of urban reclaimed wood. Our network of local sawmills turns dead urban trees into products that bring lasting value and character to your home. [Click here for details.](#)

[Visit the Collector's Corner!](#)



Check out the ReUse Center's Collector's Corner, showcasing timeless furniture, original artwork, and rare antiques. You never know what treasures you might find in the Collector's Corner!

[NEW: ReUse on Review](#)

IRS Links Regarding Donations

- [Noncash Charitable Contributions Form](#)
- [Determining the Value of Donated Property](#)
- [Charitable Contributions](#)



 **DONATE TODAY**

Privacy by  SafeSubscribeSM

Shop at  or
 and earn money
for Habitat!

[Click here](#) to find out how

Our Habitat
Partners Are

Enriching our whole community through a legacy of affordable home ownership.



Surplus and Used:

-  **Building Supplies**
-  **Furniture**
-  **Appliances**
-  **Tools**



Furniture: bookcases, entertainment centers, hutches, coffee tables, dressers, end tables, tables and chairs, couches, recliners, file cabinets, desks, framed mirrors



Appliances: washers, dryers, ranges, ovens, microwaves, refrigerators, dishwashers, range hoods, ac units

Brighton HFH Oct 2005 – April 2007

Diverted 670 tons from landfill



pollution prevention

>Initiatives

>Outreach

Alternative Fuels

Automotive

Food Processing P2

Green Construction and

Demolition

Restaurant P2

Shooting Range Stewardship

>Partnerships

>Recycling

>Regulatory Integration

>RETAP

>Green Chemistry

inside DEQ

key topics

news & events

AIR

LAND

WASTE

WATER

MTAPS

Michigan Timely Application and Permit Service

Printer Friendly Text Version Email Page A- A+Text Size

Construction Waste Recycling

C&D debris is uncontaminated solid waste resulting from construction, building remodeling, repair, deconstruction or demolition operations. It is estimated that it is the source for 30% of all waste sent to the municipal landfills. Much of the waste could be usable. We pay three times for materials that aren't used or recycled: once when we buy materials, second for disposal and third time when we purchase new materials to replace those that could have been reused.



Benefits to Recycling- This Michigan Recycling Coalition document lists 10 Reasons to Recycle.

Material Donations / Reuse

Consider donations of uncontaminated waste materials to: boy/girl scout projects; theater groups; community rebuilding efforts; vo-tec construction classes; etc. Building items can be donated to or purchased from re-stores. Most accept and re-sell usable items such as: windows; paint; lamps; flooring; cabinets; doors; etc. These stores are also good resources for small jobs that need building and home decorating materials at economical prices.

Building Material Restores - donations and resale

Material Recycling

Recycling success is dependent upon available local resources. Below are lists to help identify those local resources.

- Construction waste recycling companies and information (doc)
- Also check your local contacts and yellow pages.

Departments/Agencies

Online Services

Surveys

RSS Feeds

Related Content

- Survey for Construction and Demolition Web Site
- Construction Resources
- Construction Waste Recyclers
- FAQ - Green Building

Frequently Asked Questions

- FAQ - Demolition, Deconstruction, and Decommissioning Frequently

Asked Questions

- Introduction to Green Building - Dept. of Energy
- Making the Case for Green Building
- Construction Related

Environmental Publications

- Green and Sustainable Buildings in Michigan
- MDEQ District Office is a "Green" State Office Building

Recycling Companies





Construction Waste Recycling

Material Recycling

Construction & Demolition (C&D) debris is waste resulting from construction, building remodeling, repair, deconstruction or demolition operations. Below is a list of some of the materials with links to company listings, resources and frequently asked questions. (Also check your local contacts and yellow pages.)

<i>Material</i>	<i>Recycling Companies</i>	<i>Additional Resources</i>
Asphalt	RMMD 	1,000 yds notification Ashalt Shingle Recycling Best Practices
Brick	RMMD Bldg Matl List	FAQ 1,000 yds notification
Cardboard	RMMD	
Carpet	RMMD Bldg Matl List	FAQ
Concrete	RMMD Bldg Matl List	1,000 yds notification www.concreterecycling.org
Drywall	None available in Michigan	Drywall Reuse (pdf) www.drywallrecycling.org



RMMD Frequently Requested Lists

Updated January 2008

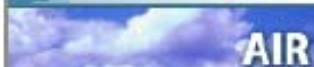
[> Initiatives](#)
[> Outreach](#)
[> Partnerships](#)
[> Recycling](#)
[Electronics Reuse
and Recycling](#)
[> Regulatory
Integration](#)
[> RETAP](#)
[> Green Chemistry](#)
[inside DEQ](#)
[key topics](#)
[news & events](#)

Construction & Demolition Debris

Oils, Solvents and Other Liquids

- [Asphalt & Concrete](#)
- [Bark, Sawdust, Trees & Other](#)
- [Bricks](#)
- [Carpet/Padding](#)
- [Ceiling Tiles](#)
- [Construction Waste](#)
- [Demolition](#)
- [Fluorescent Bulbs](#)
 - [Regulatory Guidance Document Available](#)
- [Mercury](#)
 - See [Mercury P2 website](#) for more information
- [Paint](#)
- [Pallets](#)
- [Polyvinyl Chloride-Vinyl \(PVC\) #3](#)
- [Salvaged Architecture](#)
- [Scrap Lumber](#)
- [Window Glass](#)

- [Antifreeze](#)
 - [Regulatory Guidance Document Available](#)
- [Used Oil](#)
 - [Regulatory Guidance Document Available](#)


 Michigan Timely Application
and Permit Service

Fluorescent lights, mercury	RMMD	FAQ	No reuse allowed – recycle only
Glass	RMMD		Reuse of clean glass not restricted
Paint		FAQ	Paint Recycling
PVC / Vinyl	RMMD Building Matl list PVC Resources		
Shingles	Recycling Companies	FAQ	DEQ Asphalt Shingle exemption www.shinglerecycling.org
Styrofoam	RMMD		
Toxics –mercury, pesticides, etc	Household Commercial	FAQ	
Vinyl / PVC	RMMD Building Matl list PVC Resources		
Wood	Pallet Recycling RMMD Wood Recycling	FAQ	Scrap Wood Burning

Approved Shingle Recycling

Central Michigan

- Crutchall Resource Recycling Company 517-899-1560
2127 W. Willow Street, Lansing, MI

SE Michigan

- Ideal Recycling, Inc. 248-953-2941
19300 W. Eight Mile Road, Southfield, MI

West Michigan

- Crutchall Resource Recycling Company 616-241-5553
631 Chestnut Street, SW, Grand Rapids
- 6301 North Dort Highway, Flint 810-618-5755
- 3303 Gembrit Circle, Kalamazoo 269-720-4206

Miscellaneous Resources





WASHTENAW COUNTY, MICHIGAN

Home

Government

Services For...

Online Services

About The County

Find Us

Contact Us

Directory

GO

[Government](#) > [Departments](#) > [Planning & Environment](#)

Text Size: [A](#) [A](#) [A](#)

Washtenaw County Recycling Guide

[Recycle Guide \(pdf\)](#)
[Recycling in Your Community](#)

- [Planning & Environment](#)
- [Environmental Portal](#)
- [Boards & Commissions](#)



WASHTENAW COUNTY, MICHIGAN

Home

Government

Services For...

Online Services

About The County

Find Us

Contact Us

Directory

GO

[Government](#) > [Departments](#) > [Planning & Environment](#)

Text Size: [A](#) [A](#) [A](#)

Turning Trash Into Treasure

A guide to disposal options for not-so-recyclable materials in Washtenaw County.

- [Planning & Environment](#)
- [Environmental Portal](#)

MATERIALS LISTED IN THIS GUIDE:

Ammunition	2	Freon	24
Antifreeze	2-3	Furniture	24-26
Appliances	3-5	Kitchenware	26-27
Architectural Items	5	Mattresses	27-28
Art Supplies	5-6	Medical Supplies	28
Asbestos	6	Mercury	28-29
Automobiles	7	Metal	29-30
Baby Supplies and Diapers	7-8	Motor Oil	30-31
Bags	8	Office Supplies	31
Batteries – Automotive	8-9	Packing Materials	32
Batteries - Household & Rechargeable	9-11	Paint	32-33
Bicycles	11	Pet Supplies	33
Books	11-14	Photography Supplies	33-34
Bricks and Concrete	14	Propane Tanks	34
Building Materials	14-15	Records, Tapes, DVDs, and CDs	35
Carpeting	15	Sharps	35-36
Cellular Phones	15-16	Smoke Detectors	36-37
Cleaning Supplies	16	Sporting Goods	37
Clothing and Shoes	16-18	Styrofoam	37
Computers and Disks	18-19	Tires	38
Dry Cleaning	19-20	Toner Cartridges	38-39
Drywall	20	Tools	39
Egg Cartons	20-21	Toxics	39
Electronics	21	Toys and Games	40
Equipment Rental	22	Video Tapes	40-41
Fire Extinguishers	22	Yard Waste	41
Fluorescent Light bulbs	22-23		
Food	23-24		



Construction Waste Management Resources

[DEQ Solid Waste](#) -Web site

[DEQ Hazardous Waste](#) -Web site

[Solid Waste Exemptions](#) -Web site

Bottom Pg1
has a link to
resources on
toxics such as
asbestos, lead
& mercury.

www.deq.state.mi.us/documents/deq-ess-p2-green-wmresources.doc



Construction Related Environmental Publications



Environmental Science and Services Division
Michigan Department of Environmental Quality
PO Box 30457 Lansing, MI 48909-7957

This list is designed to make it easier and provide direct access to the publications you need. Where possible, web site links are provided for the listed publications so they can be downloaded immediately. To avoid having to type sometimes long addresses, go to the website at the bottom of this page to find this in digital form and these links will actively connect you to the resources. If none is provided, indicate the number of copies you need on the list, complete the following information, and mail this to the address below, or fax to: 517-241-3571, or call 1-517-335-6250. For general information, contact the Environmental Assistance Center (EAC center) at 1-800-662-9278. If you have any suggestions or comments, please forward them to the address below. Also visit DEQ's Construction website for more information at: www.michigan.gov/deqconstruction

Name:		Phone: with area code	
Company Name:			
Address:			
City:		State:	Zip Code:
Email:			

Mail Request To:
Ms Maggie Fields
Environmental Science and Services Division



Building Savings

Strategies for Waste Reduction of Construction and Demolition Debris from Buildings

The Waste Reduction Record-Setters Project fosters the development of exceptional waste reduction programs by documenting successful ones. These programs can be used as models by others implementing their own programs to reduce disposal. This fact sheet packet is aimed at local governments that want to encourage more building-related construction and demolition debris recovery, building owners and developers interested in green building design, and building contractors seeking a competitive edge.



What is construction and demolition debris?

Handout

 onstruction and demolition (C&D) debris is produced during new construction, renovation,

www.epa.gov/garbage/pubs/combined.pdf



Department of Environmental Quality

[Michigan.gov Home](#)
[DEQ_Home](#)
[Online_Services](#)
[Permits](#)
[Programs](#)
[Site_Map](#)
[Contact_DEQ](#)

 Printer Friendly
  Text Version
  Email Page
 A- A+Text Size

[Departments/Agencies](#)
[Online Services](#)
[Surveys](#)

[RSS Feeds](#)

DEQ Quick Links

- [DEQ Calendar](#)
- [DEQ Military Salute](#)
- [DEQ Who Does What List](#) 
- [DEQ Publications](#)
- [DEQ Acronyms](#) 
- [DEQ Laws and Rules](#)
- [DEQ Shortcuts](#) 
- [Public Comment Opportunities](#)
- [DEQ Staff Spotlight](#)
- [DEQ Forms](#)
- [DEQ Training & Workshops](#)

pollution prevention

- > [Initiatives](#)
- > [Outreach](#)
 - [Alternative Fuels](#)
 - [Automotive](#)
 - [Food Processing P2](#)
 - [Green Construction and Demolition](#)
 - [Restaurant P2](#)
 - [Shooting Range Stewardship](#)
- > [Partnerships](#)
- > [Recycling](#)
- > [Regulatory Integration](#)
- > [RETAP](#)
- > [Green Chemistry](#)

inside DEQ

- [key topics](#)
- [news & events](#)

 **AIR**
 **LAND**
 **WASTE**
 **WATER**
 **MTAPS**

Green Construction and Demolition

[Construction Environmental Resources](#)

The construction and operation of homes and commercial buildings contribute significantly to a community's landuse and transportation impacts as well as the energy demand. Efforts known as "green" building and deconstruction are working to minimize these impacts.

[More](#)

Information

- [Construction Resources](#)
- [FAQ - Demolition, Deconstruction, and Decommissioning Frequently Asked Questions](#) 
- [FAQ - Green Building Frequently Asked Questions](#) 
- [Green and Sustainable Buildings in Michigan](#)
- [Introduction to Green Building - Dept. of Energy](#)
- [Making the Case for Green Building](#)
- [Michigan Green Building Case Studies](#)
- [Publications - Construction related](#) 
- [Waste Recycling - Local contacts](#)
- [Waste Recycling - State resources](#)

Upcoming Events

- **August 21-23, 2008**
[Great Lakes Green 2008](#)
 Grand Rapids, MI

Related Links

- [Building Materials -](#)

Handout

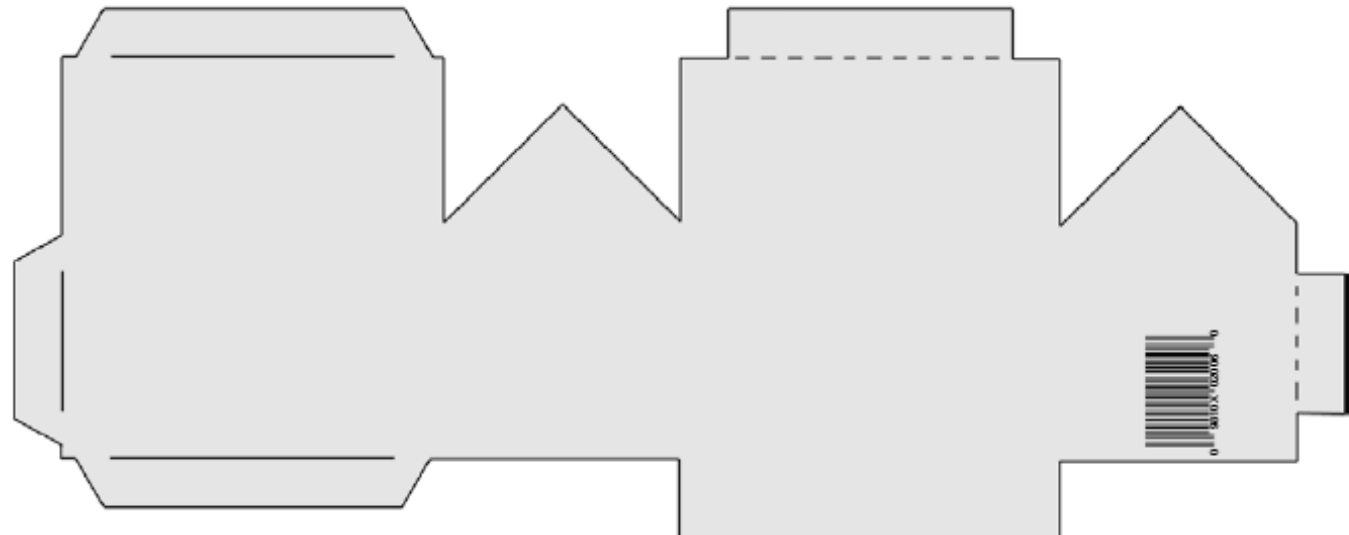
www.michigan.gov/deqconstruction

Future Directions

- Efforts have begun to build buildings with deconstruction or remodeling in mind. Making buildings easier to remodel and deconstruct will make them more marketable to clients, reduce waste, and increase the quantity and quality of recyclable materials available during remodeling and when deconstructed. This movement is going by two different names.

DfD

Design for Disassembly
in the built environment:
a guide to closed-loop design and building



DESIGN FOR
DECONSTRUCTION

Wish list & Developing efforts

- Waste Exchange
- Drywall recycling collection
 - EPA, Manufacturers, Retailer take back program
- Community centered recycling

Operations Review of Riverside Recycling Facility for the City of Portland, Maine

Conducted: Fall 2004 & Winter 2005



Gershman, Brickner & Bratton, Inc.

2007 Recycled 30,593 tons 46.5%!

- CPRC costs approximately \$3,000,000/ Year
- Revenue from commercial customers approximately \$2,650,000
- Cost to City is approximately \$350,000 / year



- City operations approximately 16,000 tons
- Resident “freebies” approximately 16,000 tons
- 32,000 tons x \$40 = \$1,280,000

Almost \$1,000,000 saved / year

GBB

Gershman, Brickner & Bratton, Inc.

C&D Recycling at Fauquier County, VA

Bob Brickner, Executive VP
Gershman, Brickner, & Bratton, Inc (GBB)
703-573-5800 Bbrickner@gbbinc.com



Gershman, Brickner & Bratton, Inc.

Fauquier Co. System





C&D Waste Processed & Recovered (first 6 months)

TYPE OF MATERIAL	Tons	%
Asphalt Shingles (1)	37	0.1%
Carpet	191	0.6%
Fines	5,131	15.1%
Inerts (1)	4,329	12.7%
Metal - Ferrous 8"+	997	2.9%
Metal - Ferrous 8"-	191	0.6%
Metal - Non Ferrous	10	0.03%
Old Cardboard	408	1.2%
Plastic (Vinyl Siding, Piping & Buckets)	127	0.4%
Clean Wood	1,604	4.7%
Subtotal Recovered:	13,025	38.2%
Non-Recovered - C&D Waste to Landfill	21,064	61.8%
TOTAL C&D Received (7/1/07 - 12/31/07)	34,089	100.0%

(1) Includes Separated Loads

Dumpster Diving

MOTHER GOOSE & GRIMM



THANK YOU!

Maggie Fields

Michigan Department Environmental Quality
ESSD 4thFlr N
PO Box 30242
Lansing, MI 48909

517-335-6250

FieldsM@michigan.gov

www.michigan.gov/deqconstruction

